

233 South Wacker Drive Suite 800, Willis Tower Chicago, IL 60606

312-454-0400 (voice) 312-454-0411 (fax) www.cmap.illinois.gov

MEMORANDUM

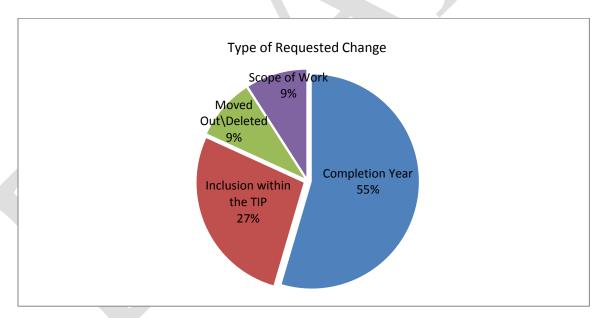
To: Transportation Committee

Date: May 30, 2014

From: CMAP Staff

Re: Semi-annual GO TO 2040/TIP Conformity Analysis & TIP Amendments

As part of the development of the GO TO 2040 Plan Update and FFY 2014-19 Transportation Improvement Program (TIP), CMAP staff asked programmers to submit changes, additions, or deletions to non-exempt projects for inclusion in the Regional air quality analysis. Of the changes requested, eleven (11) projects require air quality conformity analysis. Below is a summary of the types of requested changes.



If the GO TO 2040 Plan Update and FFY 2014-19 TIP are approved, three new non-exempt projects will be included in the TIP. These projects are included in the conformity analysis because funding for phases beyond preliminary engineering has been identified in the TIP. TIP projects with only preliminary engineering funded are exempt from conformity analysis.

The three new projects are:

- TIP ID 07-99-0114: Stage 1 of extending 191st Street from Harlem Avenue to Ridgeland Avenue.
- TIP ID 10-00-0130: Adding lanes to Aptakisic Road from IL 83 to Buffalo Grove Road.
- TIP ID 10-14-0022: Adding lanes to Buffalo Grove Road from US 45 to IL 22 Half Day Road.

Scope changes have been requested for one existing project. The scope of a project is determined by the <u>work types</u> associated with the project.

- Non-exempt work types may affect air quality and must be tested for conformity. Examples of non-exempt work types are adding lanes to a road, signal timing and extending a rail line.
- Exempt tested work types do not require an air quality conformity analysis, but the region has chosen to include the impacts of the work types in the travel demand model. Exempt tested projects include new commuter parking lots and road lane widening to standard (e.g., 10 feet to 12 feet).
- Exempt work types do not require an air quality conformity analysis. Examples of exempt work types are road resurfacing and bus rehabilitation.

The project for which scope changes have been requested is:

• TIP ID <u>09-14-0010</u>: IL 47 from I- 88 Ronald Reagan Memorial Tollway. The sponsor, in conjunction with Sugar Grove, has requested a new work type for the expansion to a full interchange.

One non-exempt project has requested to be deleted from the TIP, indicating it will no longer be completed.

TIP ID 10-12-0001: A signal interconnect on Lake St from Washington St to Belvidere Rd.

The completion year indicates when a project is anticipated to be in service to users. The conformity analysis is conducted for selected analysis years between now and 2040. The analysis years are currently 2015, 2025, 2030 and 2040. If a change in completion year crosses an analysis year, the project must be included in a new conformity analysis. Sponsors indicated that several projects have updated completion years; six of those crossed an analysis year.

- TIP ID <u>01-98-0114</u>: Corridor improvements to I- 190 O'Hare Access Roads from U.S. 12 45 Mannheim Road to I- 294 Cumberland Avenue, has requested moving the completion year from 2014 to 2020.
- TIP ID <u>02-09-0003</u>: The sponsor has requested delaying implementation from 2015 to 2020 for adding lanes and other work to Willow Road from East of I-294 to IL 43; IL 43 and over Middle Fork of the North Branch of the Chicago River; and West of Sunset Ridge Road to East of Happ Road, at Middle Fork of the North Branch of the Chicago River.
- TIP ID <u>08-98-0041</u>: Adding lanes to IL 64 North Avenue from Kautz Road to IL 59 Ingalton Road, has requested moving the completion year from 2014 to 2017.
- TIP ID <u>10-96-0006</u>: Adding lanes to Buffalo Grove Road from IL 22 Half Day Road to McHenry Rd IL 83 has requested moving the completion year from 2030 to 2018. The portion, between Deerfield Parkway and IL 83 McHenry Road has been completed.
- TIP ID <u>12-97-0002</u>: Adding lanes to US 30 Lincoln Highway from IL 59 Division Street to north of I- 55 has requested moving the completion year from 2014 to 2017.
- TIP ID <u>18-07-0670</u>: Improving and extending the UP Northwest Railroad Line from Ogilvie Transportation Center has requested moving the completion year from 2014 to 2019.

GO TO 2040 Major Capital Projects

Two GO TO 2040 Major Capital Projects are included in this report due to the implementation time frame. Those projects are:

- TIP ID <u>01-98-0114</u>: Corridor improvements to I-190 O'Hare Access Roads from U.S. 12 45 Mannheim Road to I-294 Cumberland Avenue, has requested moving the completion year from 2014 to 2020.
- TIP ID <u>18-07-0670</u>: Improving and extending the UP Northwest Railroad Line from Ogilvie Transportation Center has requested moving the completion year from 2014 to 2019.

Each TIP ID includes a hyperlink to the TIP database for further project information. Changes are shown in the attached report.

TIP projects are also viewable in a map format. The TIP map is available at http://www.cmap.illinois.gov/programs-and-resources/tip/tip-data/tip-map.

The 2015, 2025, 2030 and 2040 highway and transit networks were coded to include the project changes listed in the "Non-Exempt Projects Requiring Conformity Determination" report. The regional travel demand model was run using the updated networks. The resultant vehicle miles traveled (VMT) by vehicle class, speed, time of day and facility type were entered into US Environmental Protection Agency's MOVES model. The model generated on-road emission estimates for each precursor or direct pollutant in each analysis year.

For ozone precursors volatile organic compounds (VOC) and nitrogen oxides (NOx), the resulting emissions inventories estimates fell below the applicable budgets for the maintenance State Implementation Plan (SIP).

Both the annual direct fine particulate (PM_{2.5}) and NOx emissions inventories are below the applicable budgets from the attainment SIP.

Direct PM2.5 and NOx Emissions in Tons per Year for PM2.5 Conformity

	Fine Particulate Matter		Nitrogen Oxides	
Year	Northeastern Illinois	SIP Budget	Northeastern Illinois	SIP Budget
2015	2,535.69	5,100.00	58,438.45	127,951.00
2025	1,683.71	2,377.00	29,995.42	44,224.00
2030	1,611.08	2,377.00	27,891.03	44,224.00
2040	1,691.96	2,377.00	28,768.89	44,224.00

conformity is demonstrated by comparison of analysis year emissions to the SIP budgets

VOC and NOx Emissions in Tons per Summer Day for Ozone Conformity

		Volatile Organic Compounds		Nitrogen Oxides		
	Year	Northeastern Illinois	SIP Budget	Northeastern Illinois	SIP Budget	
	2015	70.22	117.23	154.96	373.52	
	2025	47.27	60.13	76.96	150.27	
	2030	45.76	60.13	71.08	150.27	
	2040	48.63	60.13	73.00	150.27	

conformity is demonstrated by comparison of analysis year emissions to the SIP budgets

Notes:

Off-model benefits are not included in the total emissions estimates Results updated as of May 15, 2014